

ACCESSION NR: AT4045610

For 500 kV lines the condition that the total cross section of the conductors in the line,  $q_a'$ , which assures an RF interference power level  $P/P_a$  is less than a standard, is equal to the cross section  $q_a$  which gives a desired  $P/P_a$  ratio. It is shown that when the number of conductors  $n$  and the voltage  $V$  are constant and the average current density are held constant, the cross section  $q_a$  of the line will increase as the square of the line voltage. The  $P/P_a$  ratio is to remain constant. The cross section  $q_a$  was computed as a function of the current density  $J$  for  $P/P_a$  ratios from 0.1 to 1.0, for number of conductors  $n = 2$  to 4 and for 220, 330, 500 and 750 kV lines. At full utilization, for 220 and 330 kV lines,  $P/P_a \leq 0.2$  and the corona RF interference is the only factor which influences the choice of conductors. For a 220 kV line  $q_a = 300 \text{ mm}^2$  with  $n = 2$  and  $q_a' = 250 \text{ mm}^2$  with  $n = 3$ , giving  $P/P_a \leq 0.1$ . For a 330 kV line the use of two conductors decreases  $q_a'$  from 750 to 570  $\text{mm}^2$ . This is also true for a 500 kV line where  $q_a = 1700 \text{ mm}^2$  at  $n = 2$  and  $q_a' = 1450 \text{ mm}^2$  at  $n = 3$ . For a 750 kV line  $q_a = 2800-3000 \text{ mm}^2$  and an increase in the number of conductors does not influence the  $P/P_a$  ratio. The most economical cross section of the line,  $q_{\text{min}}$ , is defined such that its in-

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It is proposed that the system reserve power be used to compensate for those  
losses. Calc. art. has: 43 equations, 7 figures and 6 tables

ASSOCIATION: Laboratoriya TVN NIIP

NO REF SOVI 009

OTHER: 000

Card 3/3

KALININ, Ye.V., kand. tekhn. nauk; TIKHODEYEV, N.N., kand. tekhn. nauk;  
KELNAR, O., kand. tekhn. nauk; KOGOUTOVA, D., inzh.

Wet flashover strength of long suspension insulators. Elek. sta. 35  
no.9:68-73 S '64. (MIRA 18:1)

1. Nauchno-issledovatel'skiy institut postoyannogo toka (for Kalinin,  
Tikhodeyev). 2. Nauchno-issledovatel'skiy institut energetiki Chekh-  
oslovatskoy Sotsialisticheskoy Respubliki (for Kelnar, Kogoutova).

VOKALEK, Ya., [Vokalek, J.], inzh.; KUCHERA, Ya. [Kucera, J.], kand. tekhn. nauk; GUTMAN, Yu.M., inzh.; TIKHODEYEV, N.N., kand. tekhn. nauk; FILIPPOV, A.A., kand. tekhn. nauk

Discharge voltages of line insulation/during switching surges.  
Elek. sta 36 no.4:55-63 Ap '65. (MIRA 18:6)

1. Nauchno-issledovatel'skiy institut energetiki Chekhoslovatskoy Sotsialisticheskoy Respubliki (for Vokalek, Kuchera). 2. Nauchno-issledovatel'skiy institut postoyannogo toka (for Gutman, Tikhodeyev, Filippov).

ARTEM'YEV, Dmitriy Yegorovich; TIKHODEYEV, Nikolay Nikolayevich;  
SHUR, Solomon Saulovich; SHCHEDRIN, N.N., nauchn. red.

[Statistical principles of the selection of the insulation of power transmission lines with potentials of a high order; switching surges and electrical characteristics of insulation] Statisticheskie osnovy vybora izoliatsii linii elektroperedachi vysshikh klassov napriazheniia; kommutatsionnye perenapriazheniia i elektricheskie kharakteristiki izoliatsii. Moskva, Energiia, 1965. 375 p. (MIRA 18:5)

L 17891-65 EPAUS-2/EWT + ER4W-2 Ref. 10 P+10 MLK  
ACCESSION NR AT4043209 S 0000 63 000 000/0003/0030

**AUTHOR:** Tikhodeyev, N.N.

**TITLE:** Principles of statistical coordination of insulation of 220-750 kV lines

**SOURCE:** Mezhdvuzovskoye nauchno-tekhnicheskoye soveshchaniye po perenapryazheniyam.  
Sverdlovsk, 1971. Izd. Sverdlovsk. 1971. 100 p. 1-77

**TOPIC TAGS:** overvoltage, power line, high voltage line, electrical transmission, insulation, insulator string, flashover

**ABSTRACT:** The author points out that the design methods used in selecting length of insulator strings according to internal overvoltages only, with safety factors allowed for a rain of 3-5 mm/min. and for damaged insulators, as well as the basis for spacing the phases in terms of internal overvoltages and wind velocity, are unsatisfactory, since full account has not been taken of statistical factors combining simultaneous overvoltage, and other factors. The paper treats these factors and also the method of their calculation. The paper contains a table of the values of the safety factors and a list of references.

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ACCESSION NR: AT4046209

unloaded lines without shunting resistances, the factor exceeding 3.5 in only 2% of the cases. After giving empirical equations for the probabilities of rain and wind of various intensities, a statistical coordination coefficient is defined in terms of the normalized deflection, and the number of flashovers per year is formally calculated, first for one string and then for an entire line. The number of flashovers per year due to rain,

are then pushed into the form of a statistical coordination coefficient, and the number of flashovers per year due to wind, rain, and lightning are calculated. The number of flashovers per year due to lightning is calculated by the method of the statistical coordination coefficient, and the number of flashovers per year due to lightning is calculated by the method of the statistical coordination coefficient.

Card 2/3

L 12891-55

ACCESSION NR: AT4046209

ASSOCIATION: Nauchno-issledovatel'skii institut postoyannogo toka (Institute for Direct  
Current Research)

SUBMITTED: 00 May 63

ENCL: 00

SUB CODE: EE

NO REF SOV: 007

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Card 3/3



L 8975-65

ACCESSION NR: AT4045612

S/0000/64/000/000/0142/0146

AUTHOR: Tikhodeyev, N. N. (Candidate of technical sciences, head of laboratory for high tension techniques)

TITLE: Minimal air gaps for 500 kv transmission lines and substations

SOURCE: Dal'niye elektropredachi 500 kv (Long-distance transmission of 500 kv. electric power); sbornik statey. Moscow, Izd-vo Energiya, 1964, #2-146

TOPIC TAGS: high voltage line, electric power transmission, power line, air gap, minimal air gap, substation, high voltage substation, breakdown voltage

ABSTRACT: In conjunction with the construction of a 100 kv line between the Lenin Hydroelectric Plant on the Volga River and Moscow, it is proposed extensive construction of 500 kv lines. And due to the fact that the available data on breakdowns available for relatively low values of 800 - 900 kv, and the data for 1000 kv for 1961 by Carol and Cozzens (Tr. AIEE, Jan. 1929), and Hagenguth, Bonnis and Begnen (El. Eng., Apr. 1952, p. 318) were contradictory, it was decided to obtain a new set of measurements for various electrode configurations and for values up to 1000 kv for gaps to grounded objects and up to 1500 kv for gaps between 2 conducting objects. The results of these measurements are included in the 147 pages of the report enclosed in the enclosure. The values are corrected to realistic humidity, pressure, and temperature according to GOST 1516-65.

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L 3975-65

ACCESSION NR: AT4045612

which was proven inaccurate by subsequent measurements conducted in 1957-61. In the

measurements conducted in 1957-61, the breakdown voltages of the samples shown in Fig. 1 of the Enclosure. Measurements were conducted in a glass vessel used in 1959 measurements for protection of the samples from the atmosphere and at a relative humidity of 60-70%. It was found that the breakdown voltages from the year in question due to the water follows the normal law with a standard deviation of 10-15%. The breakdown voltages of the samples were measured for a

1. The results of the measurements are given in the Enclosure.

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OTHER: 001

Page 2 of 4

L 8975-65

ACCESSION NR: AT4045612

ENCLOSURE : 01

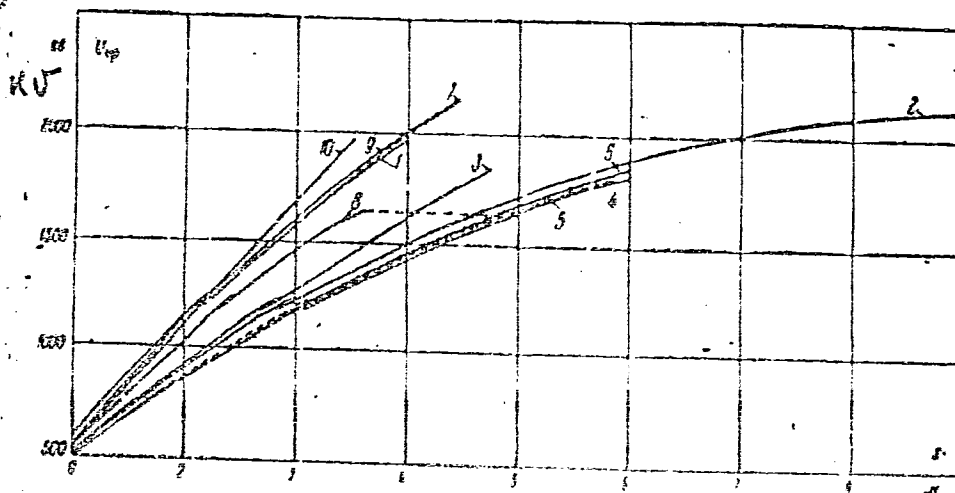


Fig. 1 - Curves of breakdown voltages of all investigated air gaps: 1 - rod to rod  
2 - rod to plane, 3 - conductor to support, 4 - horizontal ring to plane, 5 - vertical  
ring to plane, 6 - sphere to plane, 7 - ring to ring (both rings under a potential), 8 -  
ring to ring (one ring grounded), 9 - conductor to conductor, 10 - conductor to rod

2 6970-60

ACCESSION NR: AT4045612

ENCLOSURE: 02

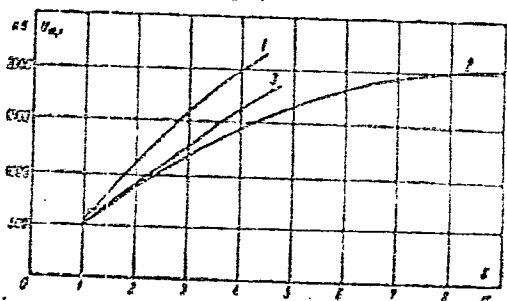


Figure 2 - Curves of breakdown voltage across long air gaps recommended for computations of minimum allowable distances on lines and in substations. 1 - asymmetrical gaps. 2 - nonsymmetrical gaps. 3 - gap between conductor and support.

ACCESSION NR: AT4045613

8/0000/64/000/000/0147/0153

**AUTHOR:** Dalinin, Ye. V. (Candidate of technical sciences, Head of a sector of laboratory for high tension techniques); Merikhalov, S. D. (Candidate of technical sciences, Senior research associate); Solomonov, N. M. (Candidate of technical sciences, Senior research associate); Tikhodeyev, S. N. (Candidate of technical sciences, Head of laboratory for high tension techniques).

**TITLE:** Electrical characteristics of insulators used on 500 kv lines

SOURCE: Dal'niye elektropredachi 500 kv (long-distance transmission of 500 kv. electric power); sbornik statey. Moscow, Izd-vo Energiya, 1964, 147-153

TOPIC TAGS: high voltage line, power line, electric power transmission, **insulator**, insulator chain, breakdown voltage, disruptive voltage, flashover

**ABSTRACT:** The disruptive voltages of insulator chains were measured to help select the proper insulator system for a 500 kv power line. The types of insulators investigated were the P-7, P-8, P-5, P-11 and the new alkaline glass types, PM and PS. Results obtained in the laboratory and in the field for dry insulators showed that discharge in this case takes place through the air between serial ring and support structures. The results are summarized in the following table. It was observed that shielding of support structure by means of metal shields or other devices does not improve the performance of the insulators. The voltage across each unit increases almost linearly with the number of units in the chain.

ACCESSION NR: AT4045613

therefore be characterized by a voltage gradient  $E_m$  which generally increases with a decrease in  $H/D$ , i.e. the ratio of insulator height to the diameter of its disc. For P-type insulators with  $H/D = 0.63$ ,  $E_m = 210 \text{ kv/m}$ . For PM-insulators with  $H/D = 0.51-0.55$ ,  $E_m = 260 \text{ kv/m}$ . The flashover characteristics of insulator chains were then investigated at the constant voltages. These were also found to increase linearly with the number of insulators in the chain and the voltage gradient in this case varied with atmospheric conditions and the amount of dirt collected on the insulators. Correspondingly, the required number of insulators in a chain for a 500 kv line, depending upon weather conditions, was generally largest for a wet insulator or heavy rains (22 for P-insulators and 23 for PM-insulators). The flashover characteristics of insulator chains were investigated and the results are shown in Figure 1. The voltage gradient  $E_m$  varied with the voltage varied

ACCESSION NR 1114264.3

EXAMINER 1114264

NO. 1114264

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ACCESSION NR: AT4045813

ENCLOSURE: 01

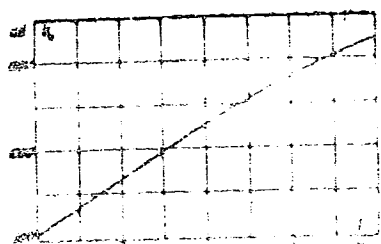


Fig. 1 Dependence of the disruptive voltage of a dry disc insulator chain with shielding on the length of the chain.



4584-45

ACCESSION NR: AT4045611

S/0000/64/000/000/0130/0142

**AUTHOR:** Yegorova, L.V. (Senior research associate); Kislova, N.S. (Junior research associate); Tikhodavov, N.N. (Candidate of technical sciences, head of laboratory);  
 and: research associate

**TITLE:** Results of corona loss measurements on the NIIP experimental line using various conductors

**SOURCE:** Dal'niye elektropereдачи 500 kv (Long-distance transmission of 500 kv. electric power): sbornik statey. Moscow, Izdat. energo, 1979, 130-142

**TOPIC TAGS:** corona, corona loss, high voltage line, electric power transmission, power line, conductor selection, weather effect

**ABSTRACT:** The investigation of corona power losses for 330 and 400 - 500 kv transmission lines, which extended over many years, has now been completed and the investigations for a 750 kv line are continuing. This article presents the final results of these investigations in two sets of normalized coefficients.

L 8684-65

ACCESSION NR: AT4045611

where  $P$  is the corona power loss,  $n$  is the number of conductors,  $r_0$  is the conductor radius,  $U$  is the line voltage and  $E$  is the field in kv/cm. The average data for all conductors under investigation is shown in Figures 1 and 2 of the Enclosure. Special purpose investigations of the corona effect on the insulation of high voltage equipment are being carried out. The results of these investigations will be reported in the near future. The same is shown by a brief variance analysis using Fisher's method which is included. (orig. and has 6 figures, 3 tables and 2 formulas)

ASSOCIATION: Laboratoriya tekhniki vy'sokikh napryazheniy NEPT (Laboratory

L 8684-65

ACCESSION NR: AT4045611

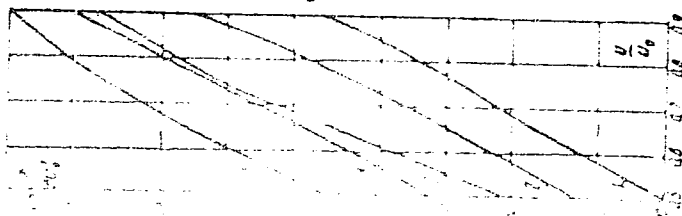
ENCLOSURE: 01

Figure 1

Average curves of

$$\frac{d}{dt} = \frac{d}{dt} \left( \frac{U}{U_0} \right)$$

for various values of



Card 1.4

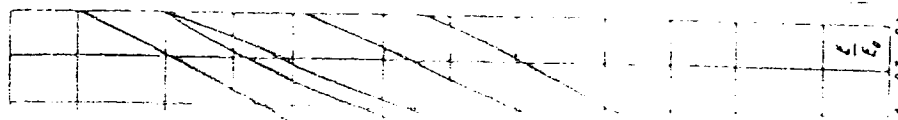
L 8684-65

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ENCLOSURE: 02

Figure 2

Average curves  
of  $\rho^*$



ACCESSION NR: AP5000963

S/0104/64/000/009/0068/0073

AUTHOR: Kalinin, Ye. V. (Candidate of technical sciences), Tikhodeyev, N. N. (Candidate of technical sciences); Kelnar, O. (Candidate of technical sciences); Kogoutova, D. (Engineer) B

TITLE: Wet flashover voltages of long insulator strings

SOURCE: Elektricheskiye stantsii, no. 9, 1964, 68-73

TOPIC TAGS: insulator string, flashover voltage, insulator test

ABSTRACT: The results of wet flashover tests of superhigh-voltage string insulators are reported. A 2x750-kv cascade transformer supplied from a 350-kva synchronous generator was used as a source of test voltages. Strings of 10-32 PM-4, 5 insulators and 12-30 P-8, 5 insulators were sprayed with chemically purified (10,000 ohm-cm) water at a rate of 3 mm/min and tested for flashover up to 1,200 kv, numerical data is tabulated. At lower voltages, flash-

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ACCESSION NR: AP5000963

overs cascaded the string. At higher voltages, some arcs struck the supporting steel girder, away from the string, at still higher voltages, when dry and wet flashover voltages came close to each other, the number of discharges occurred between the shield ring and the girder. It is concluded that for superhigh-voltage lines, the number of units in the string can be selected on the basis of the dry flashover voltage. Orig. art. has: 9 figures, 5 formulas, and 1 table.

ASSOCIATION: NIPT;

NIH energetiki ChSSR (Scientific Research Power-Engineering Institute, ChSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: EE, PR

NO REF SOV: 007

OTHER: 003

Card 2/2

AKOPYAN, A. A.; ALEKSANDROV, YEMEL'YANOV, N. P.; LEVITOV; MIROLYUBOV, NAYASHKOV, I. S.;  
PANOV, A. V.; POPKOV, V. I.; ROKOTYAN, S. S.; SOKOLOV, N. N.; TIKHODEYEV, N. N.

"The 750 kV Experimental Commercial Transmission Line Konakovo-Moscow."

report submitted for 20th Biennial Sess, Intl Conf on Large Electric Systems,  
Paris, 1-10 Jun 64.

AKOPYAN, A. A.; ALEKSANDROV, G. N.; YEMEL'YANOV, N. P.; LEVITOV, V. I.; MIROLYUBOV, A. V.  
NAYASHKOV, I. S.; PANOV, A. V.; POPKOV, V. I.; ROKOTYAN, S. S.; SOKOLOV, N. N.;  
TIKHODEYEV, N. N.

"The 750 kV Experimental Commercial Transmission Line Konakovo-Moscow."

report submitted for Intl Conf on Large Electric Systems, 20th Biennial Session,  
Paris, 1-10 Jun 64.



MIROLYUBOV, Nikolay Nikolayevich; KOSTENKO, Mikhail Vladimirovich;  
LEVINSHTEYN, Mikhail L'vovich; TIKHODEYEV, Nikolay  
Nikolayevich; DOLGIN, A.I., ~~prof.~~, ~~retsazent~~; BORISOGLIBSKIY, P.V., dots.,  
~~retsazent~~; PERKOVSKAYA, G.Ye., red.; GOROKHOVA, S.S., tekhn.red.

[Methods for calculating electrostatic fields] Metody ras-  
cheta elektrostatoicheskikh polei. [By] N.N.Miroliubov i dr.  
Moskva, Vysshaya shkola, 1963. 414 p. (MIRA 17:3)

TIKHODEYEV, Pavel Mikhaylovich

"Review of Units of Illumination," Elektrichestvo, No.10, 1947

TIKHODEYEV, P.M.

"New State Light Standard in the USSR."

Academy of Sciences USSR, Committee on Illumination Engineering, Department of Technical Sciences; Editor-in -Chief M.A.Shatelen, Corresponding Member of Academy of Sciences USSR, Academy of Sciences USSR, 1949, 120 pp, 3,000 copies

TIKHODEYEV, P. M. Dr. Tech. Sci.

"Review of M. A. Karyakin's 'Light Emissions of a Carbon Arc'," Iz. Ak.  
Nauk SSSR, Otdel. Tekh. Nauk, No.3, 1949

All-Union Sci. Res. Inst. Metrology im. Mendeleev

TIKHODEYEV, F. M.

Novyi Gosudarstvennyi Svetovoi Etalon SSSR (New Standard of Comparison of Light in the USSR), 118 p., Moscow and Leningrad, 1949.

TIKHOMYEV, P.M.

Basic method for polychromatic measurements. Trudy VNIIM no.17:  
17-46 '52. (MIRA 11:6)

(Optical measurements)

TIKHODMYEV, P.M.

~~Eliminating~~ errors in corrections for the departures from the law of the squares of the distances for incandescent lamps used in optical measurements. Trudy VNIIM no.17:98-99 '52. (MIRA 11:6)

1. Fotometricheskaya laboratoriya Vsesoyuznogo nauchno-issledovatel'skogo instituta metrologii.  
(Optical measurements)

TIKHODEYEV, P.M., prof.; YUDIN, M.F., kand.tekhn.nauk, otv.red.;  
MALIKOV, M.F., prof., retsenzent; MAKHROVSKIY, V.G., prof.,  
retsenzent; FRUMKIN, P.S., tekhn.red,

[Essays on standard (metrological) measurements] Ocherki ob  
iskhodnykh (metrologicheskikh) izmereniyakh. Moskva, Gos.  
nauchn.-tekhn.izd-vo mashinostroit.i sudostroit.lit-ry 1954.  
215 p. (Leningrad. Vsesoyuznyi nauchno-issledovatel'skii  
institut metrologii, no.21) (MIRA 13:3)

1. Direktor Vsesoyuznogo nauchno-issledovatel'skogo instituta  
metrologii imeni D.I.Mendeleyeva (for Yudin).  
(Mensuration)



TIKHODEYEV, P.M., professor.

Work of M.A. Shatelen in the field of lighting engineering and  
metrology. Elektrichestvo no.12:6-8 D '55. (MLRA 9:3)  
(Shatelen, Mikhail Andreevich, 1865-)

7 17 10 17 11 11

AID P - 4116

Subject : USSR/Electricity  
Card 1/1 Pub. 27 - 3/33  
Author : Tikhodeyev, P. M., Prof.  
Title : Work of M. A. Shatelen in the field of illumination engineering and metrology.  
Periodical : Elektrichestvo, 12, 6-8, D 1955  
Abstract : The author gives a short account of Professor Shatelen's activity in the field of illumination engineering and metrology.  
Institution : None  
Submitted : O 31, 1955

TIKHODEYEV, P.M.

Rotatory absorbers for the accurate measurement of radiation  
energy. Izv. tekhn. no.1:28-30 Ja-F '55. (MIRA 8:9)  
(Radiation--Measurement)

TIKHODEYEV, P.M., doktor tekhnicheskikh nauk, professor

Light units; proposed new standard. Svetotekhnika 1 no.1:8-12  
F '55. (MLRA 8:9)

1. Vsesoyuznyy institut metrologii  
(Optical measurements)

TIKHODEYEV, P.M.

535.241  
8576. Light units (draft of new standard). P. M. Tikhodeyev.  
Svetotekhnika, No. 1, 8-11 (1955) In Russian.  
The new standard is based on the lumen and the MKS system of units.  
W. R. STOKER

Smw 8576

~~TIKHODEYEV, P.M.~~

GUREVICH, M.M., professor; KARYAKIN, N.A., professor; MESHKOV, V.V.,  
professor; SOKOLOV, M.V., professor; ~~TIKHODEYEV, P.M.~~ professor;  
FABRIKANT, V.A., professor; IVANOVA, N.S., kandidat tekhnicheskikh  
nauk; SHNEYBERG, Ya.A.; YUROV, S.G.; ASHKENAZI, G.I., inzhener.

Professor L.D. Bel'kind; on his sixtieth birthday. Svetotekhnika  
2 no.5:26 S '56. (MLRA 9:11)

(Bel'kind, Lev Davidovich, 1896-)

TIKHODEYEV, R.M. doktor tekhnicheskikh nauk, professor.

Present state of the system of light units (in connection with the promulgation of a new standard for light units). Svetotekhnika 2 no.6:9-11 # '56. (MLRA 9:12)

1. Vsesoyuznyy institut metrologii.  
(Light--Standards)

TIKHODEYEV, P.M.

A.K.Kolesov; on his 70th birthday. Izv.tekh.no.3:83 My-Je '56.  
(Kolesov, Aleksandr Konstantinovich, 1886-) (MIRA 9:9)



TIKHODEYEV, P.M.

Illuminance units according to All-Union State Standard nos.7932-56.  
Izm.tekh. no.5:8:11 S-0 '56. (MLRA 10:2)  
(Lighting--Standards)

TIKHODEYEV, P.M.;

On determining the roentgen unit. Izv.tekh. no.1:15-16 Ja-F '56.  
(MLRA 9:5)

(Radiography) (X rays--Measurement) (Gamma rays--Measurement)

BEL'KIND, L.D.; KNORRING, G.M.; LEVITIN, I.Ye.; MESHKOV, V.V.; RYABOV,  
M.S.; SOKOLOV, M.V.; TIKHODIYEV, P.M.; SHAYKEVICH, A.S.

Aleksandr Anan'evich Trukhanov; on the occasion of the 60th  
anniversary of his birth. Svetotekhnika 4 no. 7:28 J1 '58.  
(MIRA 11:7)

(Trukhanov, Aleksandr Anan'evich, 1898-)

*Tikhonov, M.M.*  
TIKHONOV, P.M., doktor tekhn. nauk, prof.

Changes in the regulations for electric lighting in "Building specifications and regulations" and measures for carrying them into effect. Svetotekhnika 4 no.3:12-18 Mr '58. (MIRA 11:2)  
(Electric lighting)

BOLDYREV, N.G., GUREVICH, M.M., TIKHODEYEV, P.M., FEDOROV, N.T.

On N.D. Niuberg's article "Colorimetric experiments as a means of  
studying color sense and the requirements they should meet."  
Biofizika 3 no.3:381-383 '58 (MIRA 11:6)  
(COLORIMETRY)  
(COLOR SENSE)

*TIKHODEYEV P.M.*

ARUTYUNOV, V.G.; GORBATSEVICH, S.V.; ZUBRILIN, V.P.; KOLOSOV, A.K.; ROMA-  
NOVA, M.F.; TIKHODEYEV, P.M.; CHERNYSHEV, Ye.T.; SHIROKOV, K.P.;  
SHRAMKOV, Ye.G.; YANOVSKIY, B.M.

Mikhail Fedoseevich Malikov, on his 75th birthday. Iss. tekhn. no.2:  
85-86 Mr-Ap '57. (MLBA 10:6)

(Malikov, Mikhail Fedoseevich, 1882-)

*Tikhodeyev*  
MESHKOV, V.V., prof.; SOKOLOV, M.V., prof.; TIKHODEYEV, P.M., prof.; FEDOROV,  
B.F., prof.; RYABOV, M.S., kand. tekhn. nauk.

Professor V.N. Klianitsa; on his 70th birthday. Svetotekhnika 4 no.1:  
28 Ja '58. (MIRA 11:1)

(Klianitsa, Viktor Nikolaevich, 1887-)

TIKHODEYEV, P.M.; FEDOROV, B.F.; VOLOTSKOY, N.V.; TELYAT'YEV, V.V.; ZIL'BER, D.A.;  
SAPOZHNIKOV, R.A.; SHAYKEVICH, A.S.; KNORRING, G.M.; SEREBRYAKOV, V.M.;  
DADIOMOV, M.S.; LEVIT, G.O.

Professor Viacheslav Vasil'evich Novikov; on his 70th birthday.  
Svetotekhnika 5 no.2:30 F '59. (MIRA 12:1)  
(Novikov, Viacheslav Vasil'evich, 1888-)



TIKHODEYEV, S.M.

Roentgenography in duodenitis. Klin.med., Moskva no.4:72-78 Ap '50.  
(CLML 19:3)

1. Moscow.

40323

S/194/62/000/006/098/232  
D288/D308

9,4330

AUTHOR: Tikhodeyev, Yu.S.

TITLE: Design of the volt-amp characteristic of a tunnel diode

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1962, abstract 6-4-21 1 (V sb. 'Poluprovodnik. pribory i ikh primeneniye. no. 7, M., Sov., radio, 1961, 55-66)

TEXT: The relationship between volt-amp characteristic and physical properties of a tunnel diode are discussed in detail in terms of quantum mechanics. Based on a quantum reservoir model of the height  $d$  comprising the n- and p- zones and the junction, general expressions are obtained for the total current density in terms of Fermi-Dirac distribution functions, the densities of quantum states  $g_1(\varepsilon)$  in the n-region and  $g_2(\varepsilon)$  in the p-region and the probability of tunnel pass of a particle through the barrier. Densities of quantum states according to Debye's method are expressed in terms of the

Card 1/2

Design of the volt-amp characteristic ... S/194/62/000/006/098/232  
D288/D308

effective mass  $m^*$ . The required value of the broadening of impurity levels, due to overlapping of the zone of these levels by the basic zones, is found by the method of Heitler-London exchange integrals. The narrowing of the forbidden zone in the case of zone overlapping is determined through the simplifying assumption that the iso-energetic surface is spherical. The value obtained permits the finding of Fermi levels. For the most promising material, Ga As, the most probable direct tunnel passage is considered, neglecting dispersion. It is shown that the transparency coefficients  $D$  for the particle passage either way through the barrier are the same. By using the expression for  $D$  obtained by the Brillouin-Wentzel-Kramers method, the direct tunneling probability through the barrier is calculated. 11 references. [Abstracter's note: Complete translation.]

Card 2/2

BURNIKH, V.S.; OVSIYANKO, V.V.; PASICHNIK, A.G.; TIKHOLAZ, N.V.

Hydraulic investigation of Donets gas pipelines. Neft. i gaz. prom.  
no.4:59-64 C-B '63. (MIRA 17:12)

1. Ukrainskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta  
prirodnoy gazu.

POPOV, N.G.; TIKHOLOV, K.; DOCHEV, D.

Our experience with gastric acidity determination with the use  
of diagnex blue. Suvr. med. (Sofia) 15 no.12:27-32 '64

TIKHOLOV, Khr., inzh.; KHERMAN, Oto, inzh.

Changing the Sofia network from 150 to 380/220 v. Elektroenergiia  
15 no. 7/8:21-22 J1-Ag '64.

S/115/62/000/007/006/008  
E192/E382

AUTHOR: Tikhomandritskaya, V.A.

TITLE: Coaxial junction with a reduced reflection coefficient

PERIODICAL: Izmeritel'naya tekhnika, no. 7, 1962, 41 - 42

TEXT: A demountable junction for a coaxial cable consists of internal and external cylinders (see Fig. 1). If the external-conductor cylinder has  $n_1$  slots whose width is  $S_1$  and  $n_2$  slots having a width  $S_2$ , the quantity:

$$A = \frac{n_1 S_1 + n_2 S_2}{\pi D_0} \quad (1)$$

can be regarded as the "weight" of the slots with regard to the circumference of the cylinder. Similarly, the weight for the internal cylinder is: ✓

$$B = n_3 S_3 / \pi d_0 \quad (2)$$

Card 1/2

Coaxial junction ....

S/115/62/000/007/006/008  
E192/E382

where  $n_3$  is the number of slots and

$S_3$  is the width of the slots of the internal cylinder,  
respectively.

The wave impedance of the section occupied by a junction of this type is:

$$W_1 = 158 \lg. \frac{D_o + 2AH}{d_o - 2Bh}$$

which differs from the wave impedance of the uniform coaxial line. This difference in the impedances results in reflections at the junction. The magnitude of the reflection can be reduced by reducing the width of all the slots of both the conductors down to 0.2 - 0.3 mm and by using a special key for locking the external cylinder. In this way, the reflection coefficient of the junction can be halved. There are 4 figures and 2 tables.

Card 2/6:2





2828-  
S/194/61/000/001/035/038  
D216/D304

9,2150

AUTHOR: Tikhodeyev, Yu. S.

TITLE: The method of selecting power transistor triodes  
for full-wave circuit operation

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,  
no. 1, 1961, 26, abstract 1 K226 (V Sb. Poluprovod-  
nik, pribory i ikh primeneniye, no. 4, M., Sov.  
Radio, 1960, 202-205)

TEXT: The suggested method is based on an easily established re-  
lationship between the non-linear distortions ( $K_F$ ) and power loss  
( $\Delta P$ ) and the difference between the collector current which results  
in the unbalance of the full-wave power transistor rectifying cir-  
cuit. The method consists of observing the transient characteris-  
tics of transistor-triodes on a CRO. To do so the power triodes  
are connected in the common emitter configuration and loaded with  
a pure resistance. A constant AF voltage from an AF generator

Card 1/2

The method of selecting...

S/194/61/000/001/035/038  
D216/D304

is applied to the input. The vertical-deflection plates of the CRO are connected parallel to the input and horizontal-deflection plates parallel to the load. The beam deflection in the vertical and horizontal direction is thus proportional to the input voltage  $U_{in}$  and the collector current  $I_c$  respectively and the angle

$$\phi = \tan^{-1} \frac{U_{in}}{I_c R_L}$$

of the slope of the transient of the CRO screen with respect to the X-axis, for constant  $U_{in}$  and load  $R_L$ , determined only by  $I_c$ . Assuming permitted  $K_f$  and  $\Delta P$ , or, which is the same, the permitted difference of current  $I_c$  in the arms, a certain angle  $\theta$  is obtained between the limiting transient characteristics. Those triodes are chosen, whose transient characteristics have their slopes within the limits of  $L\theta$ .

Card 2/2

S/194/61/000/006/039/077  
D201/D302

94310  
AUTHORS:

Vaksenburg, V.Ya., Pashkevich, M.A. and Tikhodeyev, Yu.S.

TITLE:

A high frequency drift transistor with increased breakdown emitter voltage

PERIODICAL:

Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1961, 15, abstract 6 D91 (V sb. Poluprovodnik. pribory i ikh primeneniye, no. 5, M., Sov. radio, 1960, 61-82)

TEXT: Problems are considered of the design of a germanium transistor for frequencies  $> 100$  mc/s, analogous to types P401-P403 (P401-P403), but differing by a larger value of permissible voltage at the emitter-base junction. (5-10 V as compared with 1-2 V for P401-P403). Analytical relations are derived from the strict theory of drift junction transistors; these relations permit the evaluation of the optimal diffusion process for obtaining a junction transistor ✓<sub>B</sub>

Card 1/2

A high frequency drift transistor...

S/194/61/000/006/039/077  
D201/D302

with the required parameters. The calculated values are in good agreement with experimental data. The problems are considered in choosing the emitter alloy and in determining ways of obtaining lower base resistance. [Abstracter's note: Complete translation]

VB

Card 2/2

Temperature dependence...

S/194/61/000/006/041/077  
D201/D302

minority carriers on the concentration of the active impurity, it is possible to determine the character of impurity distribution in the base layer. From the author's summary. [Abstracter's note: Complete translation]

VB

Card 2/2

SOKOLOVA, T.A.; TIKHODEYEVA, I.I.

Synthesis of N-substituted methacrylamides. Part 5: N,N'-  
alkylenedimethacrylamides. Zhur.ob.khim. 31 no.7:2222-2224  
Jl '61. (MIRA 14:7)

1. Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSSR.  
(Methacrylamide)

24425

S/079/61/031/007/007/C08  
D229/D305

15.8080

AUTHORS:

Sokolova, T.A., and Tikhodeyeva, I.I.

TITLE:

Synthesis of N-substituted methacrylamides. V. N,N'-alkylenedimethacrylamides

PERIODICAL: Zhurnal obshchey khimii, v. 31, no. 7, 1961,  
2222 - 2224

TEXT: The paper describes the first synthesis and characterization of N,N'-ethylene-, 1,2 propylene - hexamethylene, and decamethylene dimethacrylamides. As acylating agents, methacrylic acid chloride (MAC) and methacrylic acid anhydride (MAA) were used. Reaction of MAC with alkylene diamines required equimolar quantities of the reactants. Owing to the high basicity of the diamines, the reaction is strongly exothermic. Reaction of the diamines (1 mole) with MAA (2 moles) gave high yields of the desired products. It was also observed that ethylene diamine reacts with methacrylic acid giving a salt, and not an addition product across the double

Card 1/3



24425

Synthesis of N-substituted ...

S/079/61/031/007/007/038  
D229/D305

ASSOCIATION: Institut visokomolekulyarnykh soyedineniy, Akademii nauk, SSSR (Macromolecular Compounds Institute, Academy of Sciences, USSR)

SUBMITTED: July 16, 1960

✓

Card 3/3

SOKOLOVA, T.A.; OVSYANNIKOVA, L.A.; TIKHODEYEVA, I.I.

Synthesis of N-substituted methacrylamides. Part 7. Zhur. ob.  
khim. 33 no.5:1502-1504 My '63. (MIRA 16:6)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.  
(Methacrylamide)

COMMON ELEMENTS										COMMON VARIABLE MODES									
MATERIALS MODE										PROCESS AND PROPERTIES MODE									
<p><b>TIKHOLAZ, T. N.</b>  <i>CA</i></p>										<p>Changes of the quality of lubricating oils in aviation motors. T. N. Tikholaz and A. F. Vorob'eva. <i>Neftekhim. Khim. 1958, No. 5, 38-41.</i> Expts. are described in detail. Conclusions: (1) The oil undergoes changes in the motor during the first 20 hrs., although retaining its chem. properties even after 50 hrs. (2) Contamination of oil takes place mainly through burned lubricating oil and abraded particles of the motor which collect in the oil. (3) These contaminants modify the properties of the oil. (4) Thus the sp. gr., viscosity, viscosity-temp. index, Slight no., asphaltene, C and ash contents give excessive values when mech. admixts. and water are present. In the presence of fuel in the oil the viscosity, viscosity-sp. gr. const. and sp. gr. decrease, while the viscosity-temp. index increases. (5) When the oil is dild. with heavy gaso-line ends, its viscosity is lowered insignificantly, remaining within the specifications. (6) The stability of the oil after 20 hrs. of work is not lowered up to 50 hrs. (7) It is recommended to filter the oil through paper for the removal of foreign particles. A. A. Bochtinsk</p>									
<p>ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>										<p>FROM SOURCE</p>									
<p>SEARCHED INDEXED</p>										<p>SEARCHED INDEXED</p>									

BUGAYEV, Nikolay Viktorovich [Buhaiov, M.]; ~~TIKHOMON, A.~~

[On the road of labor victories] Shliakhom trudovykh peremoh.  
Kyiv, Derzh.vyd-vo polit.lit-ry URSR, 1958. 97 p. (MIRA 12:12)  
(Ukraine--Agriculture)

BELOVOL, N., podpolkovnik; MEL'NIK, N., podpolkovnik; TIKHOLAZ, I., mayor

"Individual evaluation"; discussion of the article published in  
No.4. Voen. vest. 43 no.9:51-53 S '63. (MIRA 16:10)

(Military education)

TIKHOLOV, K.

Studies on the frequency of hypotension in Bulgaria. Suvrem. med. Sofia  
8 no.3:3-10 1957.

Iz Katedrata po bolnichna terapiia pri VMI - Sofia (Zav. katedrata:  
prof. Al. Puklev).  
(HYPOTENSION, statistics,  
in Bulgaria (Bul))

TIKHOLEV, K.

Our experience in the treatment of diabetes with chlorpropamide.  
Suvr.med. (Sofia) 15 no.3:16-25 '64

\*

GELINOV, Khr.; TIKHOLOV, K.

Mucoviscidosis in adults. Suvr. med. 14 no.9:42-52 '63.

(PANCREATIC CYSTIC FIBROSIS)



TIKHOLEV, K.  
PUKHLEV, Al., Prof.; TIKHOLEV, K.

Results of the treatment of diabetes with new sulfonamide-  
urea preparations. Suvrem. med., Sofia 8 no.1:21-35 1957.

1. Iz katedrata po bolnichna terapiia pri VMI -- Sofia  
(zav. katedrata: prof. A.L. Pukhlev).

(DIABETES MELLITUS, therapy

carbutamide & tolbutamide (Bul))

(UREA, related compounds,

carbutamide & tolbutamide, ther. of diabetes mellitus (Bul))

(SULFONAMIDES, therapeutic use,

carbutamide & tolbutamide in diabetes mellitus (Bul))

TIKHLOV, K.; DOBREV, P.St.

Treatment of tuberculous diabetics with new peroral antidiabetic drugs. Suvrem.med., Sofia no.12:39-52 '59.

1. Iz Katedrata po bolnichna terapija pri VMI - Sofia. Zav. katedrata po ftiziatrica pri VMI - Sofia. Zav.katedrata: prof. K. Mondeshki.

(TUBERCULOSIS PULMONARY compl.)  
(DIABETES MELLITUS compl.)

POPOV, N.; TIKHOLOV, K.

On uropepsin and its diagnostic significance. Suvrem med., Sofia  
no.2:85-92 '61.

1. Katedra po bolnichna terapiia pri Visshia meditsinski institut,  
Sofia (Rukov. na katedrata prof. A. Pukhlev.)

(UROPEPSIN chemistry)

ASTHAG, A.; TIKHOLEV, K.

Biguanides--new oral antidiabetic preparations. Sovr. med.  
(Sofia) 16 no.9:557-564 '65.

TIKHOLOV, M.

Changes in the frequency and the significance of the presence of tubercular pleurisy on the development of pulmonary tuberculosis. Suvrem med., Sofia no.1:43-50 '61.

1. Katedra po ftiziatririia pri Instituta za spetsializatsiia i ushuvurshenie na lekarite. (Rukovoditel na katedrata prof. St. Todorov.)

(TUBERCULOSIS PULMONARY physiol)

KEREKOVSKI, Iv.; NIKOLOV, St.; PAVLOV, V.; TIKHOLOVA, Tsv.

Immediate and remote sequelae of 'nfectious hepatitis. Suvrem. med.,  
Sofia 8 no.4:56-60 1957.

1. Iz Okružna bolnitsa V. Kolarov - Kolarovgrad.  
(HEPATITIS, INFECTIOUS, complications,  
sequelae (Bul))

TIKHOMANDRITSKAYA, V.A.

Coaxial plug with a reduced reflectance. Izv.tekh. no.7:41-42  
J1 '62. (MIRA 15:6)  
(Wave guides)

TIKHOMANDRITSKAYA, V.A.

Symmetric indicator head for coaxial measuring lines. Izv. tekhn.  
no.1:45-47 Ja '64. (MIRA 17:11)



L 23288-65

ACCESSION NR: AP4049922

S/0020/64/159/003/0599/0601

AUTHOR: Zubkov, V.I.; Tikhomiarov, M. v.; Golubtsov, S. A.; Andrianov, K. A. **B**  
(Academician)

TITLE: Mass-spectrometric study of intermediate products of the reaction between silicon and cuprous chloride

SOURCE: AN SSSR. Doklady\*, v. 159, no. 3, 1964, 599-601

TOPIC TAGS: mass spectrometer, silicon oxidation, cuprous chloride, silicon dichloride

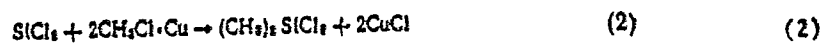
ABSTRACT: The work was carried out by means of an MI-1305 mass spectrometer with an ion source. The mixture of cuprous chloride and silicon (particles 75-250m) was placed in an ampoule (see Fig. 1 of the Enclosure), which was surrounded by a tungsten heater. The temperature of the ampoule was measured with a thermocouple attached to its outer surface. The gaseous products of the reaction entered the ionization chamber of the source through an aperture in a platinum diaphragm. Silicon tetrachloride could also be introduced into the ion source through this ampoule. The ion currents were measured with an SI G1 ion counter. The mass-spectrometric study of the reaction mixture  $\text{CuCl} + \text{Si}$  showed that even at low temperatures (180C), the ratios of peak intensities in the mass spectrum correspond to the presence of the compound

Card 1/3

L 23288-65

ACCESSION NR: AP4049922

$\text{SiCl}_2$ . This also confirms the following equations:



The authors also studied the mass spectra of the end product of the reaction, silicon tetrachloride, and of the gaseous products evolved. Orig. art. has: 1 figure, 1 table, and 3 chemical equations.

ASSOCIATION: None

SUBMITTED: 10Jul64

ENCL: 01

SUB CODE: IC,GP

NO REF SOV: 004

OTHER: 001

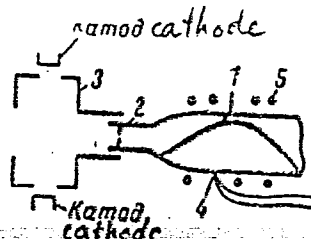
Card 2/3

L 23288-65

ACCESSION NR: AP4043922

ENCLOSURE: 01

Fig. 1. Schematic illustration of the mass spectrometer.



1 - ampoule, 2 - source, 3 - Pt diaphragm, 4 - thermocouple,  
5 - tungsten heater.

Card 3/3

9 (0)

CHICOM/31-59.12-4/12

AUTHOR: V. V. Tikhomilov

TITLE: The Development of Radio Electronics in the U.S.S.R.

PERIODICAL: K'io Hsueh Tsung Pao, 1959, Nr 12, pp 393-395

ABSTRACT: This is a translation of a Russian-language article published in "Bulletin of Soviet Academy of Science," Nr. 3, 1959. Translator: Shih, Jen-ta (舒润涛). Proof reader: Chang, Chih-ch'eng (張志誠).

Card 1/1

TIKHONIR, E. N.

"Determination of Reaction Rate Constant of Hydrogen Atoms With Hydrocarbons in Relation to the Reactivity of Hydrocarbons." Sub 9 Mar 51, Moscow Order of Lenin State U imeni K. V. Lomonosov.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 2 May 55

LIKHACHEV, A.G.; TIKHOMIREVA, G.I.

Report of the executive committee of the All-Union Scientific  
Society of Otolaryngologists for the year 1953. Vest. oto-rin.  
16 no.6:81-90 H-D '54. (MLRA 8:1)  
(OTORHINOLARYNGOLOGY  
in Russia, society report)

TIKHOMIRO, N. I.

Characteristics of Transbaikalian deposits of the cassiterite-sulfide formation and their association with magmatic activity.  
Sov. geol. 3 no.7:49-58 J1 '60. (MIRA 13:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut.  
(Transbaikalia--Cassiterite)  
(Transbaikalia--Sulfides)

TIKHOMIROV, A., kand. tekhn. nauk; FALEYEV, R., inzh.; GORIZONTOVA, Ye., inzh.

Increasing the capacity of poultry processing lines. Mias. ind.  
SSSR 30 no.3:16-19 '59. (MIRA 12:9)

1. Tsentral'nyy nauchno-issledovatel'skiy institut ptitsepererabatyvayushchey promyshlennosti.  
(Poultry plants)



TIKHOMIROV. A.

Homemade sighting lens. Sov.foto 18 no.12:61-62 D '58.

(MIRA 11:12)

(Motion-picture cameras)

TIKHOMIROV, A., kandidat tekhnicheskikh nauk; GORIZONTOVA, Ye., inzhener.

Poultry processing industry abroad. Mias. ind. SSSR 27 no.4:  
60-63 '56. (MLRA 9:10)

(Poultry plants)

TIKHOMIROV, A.

ca

26

Pentaerythritol-phthalic acid (paint) enamels. A. Ya. Drinberg and A. Tikhomirov. *Ovg. Chem. Ind. (U. S. S. R.)* 5, 21-5 (1937); cf. Petrov, *et al.*, *C. A. A.* 30, 5325.  
Enamels, superior to Glyptal, resulted without the use of tung oil by condensing 1.6 mols. of pentaerythritol with 2 mols. of phthalic anhydride and linseed-oil fat acids at 190-220° for 5-5.5 hrs. The product dissolved in turpentine or solvent naphtha dries completely at 110° in 45 min. without the aid of siccatives. The coating is highly lustrous, requiring no polishing. Chas. Blaine

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

TIKHOMIROV, A., sadovod-lyubitel' (Kazan')

Collective measures in orchards. Zashch. rast. ot vred. i bol.  
5 no.6:14 Je '60. (MIRA 16:1)

(Fruit—Diseases and pests)

TIKHOMIROV, A.

First stable Soviet currency unit. Den. 1 kred. 20 no.12:  
32-36 D '62. (MIRA 16:1)

(Money)

TIKHOMIROV, A.

How do you load the "Kiev 16S-2?" Sov. foto 22 no.7:36-37 JI '62.  
(MIRA 16:4)

(Cameras)

TIKHOMIROV, A.

Once more about a table for film mounting. Sov.foto 20 no.1:40  
Ja '60. (MIRA 13:5)  
(Motion-picture projection)



TIKHOMIROV, A., kinolyubitel'

When will the amateur photographer be able to obtain all  
necessary supplies? Sov.foto 20 no.7:35 J1 '60.

(MIRA 13:7)

(Photography--Equipment and supplies)

TIKHOMIROV, A., kand.tekhn.nauk

Basic trends in the mechanization of operations in the poultry  
industry. Mias.ind.SSSR 30 no.6:25-27 '59. (MIRA 13:4)

1. Tsentral'nyy nauchno-issledovatel'skiy institut ptitseperera-  
batyvayushchey promyshlennosti.  
(Poultry plants)

TIKHOMIROV, A.

USSR/Chemical Technology - Chemical Products and Their  
Application. Food Industry

I-28

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 13983

Author : Tikhomirov A., Fadeyev R., Batalov A.  
Inst : All-Union Scientific Research Institute of Poultry  
Industry

Title : New Continuous Operation System of Processing Freshly  
Killed Ducks and Geese.

Orig Pub : Myasnaya industriya SSSR, 1956, No 3, 16-19

Abstract : The All-Union Scientific Research Institute of Poultry  
Industry has designed and built a specimen of a conti-  
nuous operation chamber for heat processing of killed  
geese and ducks at 72°. Provision of the chamber has  
made it possible to mechanize the processes of picking  
of water fowl and to evolve a conveyer line processing  
system having an output capacity of 2400 geese or ducks  
per shift. Operations of heat treatment and picking of

Card 1/2

- 418 -

USSR/Chemical Technology - Chemical Products and Their  
Application. Food Industry

I-28

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 13983

neck feathers are automatically controlled. Large feathers are removed by roller machines, small feathers and down by combing machines. A conveyer line of somewhat lower output capacity (1600 geese or 2400 ducks per shift) has been set up and operates successfully at the Volokamsk poultry combine. Described are the arrangement of the chamber and specific features of this conveyer line system. A diagram is included showing the continuous operation processing of freshly killed water fowl.

Card 2/2

- 419 -